

7



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/611,647	07/01/2003	Qu Zhigang	NOKM.052PA	2079
40581	7590	04/20/2005	EXAMINER	
CRAWFORD MAUNU PLLC 1270 NORTHLAND DRIVE, SUITE 390 ST. PAUL, MN 55120			PHUONG, DAI	
			ART UNIT	PAPER NUMBER
			2685	

DATE MAILED: 04/20/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 10/611,647	Applicant(s) ZHIGANG, QU	
	Examiner Dai A Phuong	Art Unit 2685	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 01 July 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-19 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-19 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 01 July 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Rejections - 35 USC § 101

1. 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

2. Claim 18 is rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter.

Claim 18 is drawn to a “proxy”, i.e., a “computer program” *per se*, as recited in the preamble and as such is non-statutory subject matter. See MPEP § 2106.IV.B.1.a. Data structures not claimed as embodied in computer readable media are descriptive material *per se* and are not statutory because they are not capable of causing functional change in the computer. See, e.g., *Warmerdam*, 33 F.3d at 1361, 31 USPQ2d at 1760 (claim to a data structure *per se* held nonstatutory). Such claimed data structures do not define any structural and functional interrelationships between the data structure and other claimed aspects of the invention, which permit the data structure's functionality to be realized. In contrast, a claimed computer readable medium encoded with a data structure defines structural and functional interrelationships between the data structure and the computer software and hardware components which permit the data structure's functionality to be realized, and is thus statutory. Similarly, computer programs claimed as computer listings *per se*, i.e., the descriptions or expressions of the programs are not physical “things.” They are neither computer components nor statutory processes, as they are not “acts” being performed. Such claimed computer programs do not define any structural and functional interrelationships between the computer program and other claimed elements of a computer, which permit the computer program's functionality to be

realized.

Claim Rejections - 35 USC § 102

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

4. Claims 1, 4-5, 9-13 and 16-19 are rejected under 35 U.S.C. 102(e) as being anticipated by Lin et al. (Pub. No: 2003/0028612).

Regarding claim 1, Lin et al. disclose a method for retrieving content from a mobile terminal operating as a server within a network ([0024]), comprising: receiving a request for data from the network 216 ([0029]); modifying parameters of the request to indicate that the mobile terminal is the source of the content ([0036] to [0037]); forwarding the modified request to the mobile terminal ([0038]); and supplying content from the mobile terminal in response to the modified request ([0038]).

Regarding claim 4, Lin et al. disclose all the limitation in claim 1. Further, Lin et al. disclose the method wherein forwarding the modified request to the mobile terminal comprises using a Session Initiation Request (SIR) (fig. 3, [0029 and [0031]. Inherently, when client devices 216 request server service for access to a Web page or Web site provided by mobile server 100 (user equipment 204). Next, the mobile server 100 sends request to support node 210

Art Unit: 2685

to provide a service server. Therefore, the request message sends from clients 216 to user equipment 204 (mobile server 100) which also includes a Session Initiation Request).

Regarding claim 5, Lin et al. disclose all the limitation in claim 4. Further, Lin et al. disclose the method wherein the SIR requests the mobile terminal to establish a Transmission Control Protocol (TCP) connection with a network proxy prior to supplying content from the mobile terminal ([0031] to [0033]).

Regarding claim 9, Lin et al. disclose a mobile server system ([0024]), comprising: a network terminal 212 coupled to transmit a content request ([0027]); a proxy 214 coupled to receive the content request and arranged to modify the content request ([0028]); and a mobile terminal 204 coupled to the proxy to receive the modified request ([0026]), wherein the modified request indicates that the mobile terminal is operating as a mobile server to provide the requested content to the network terminal ([0029]).

Regarding claim 10, Lin et al. disclose all the limitation in claim 9. Further, Lin et al. disclose the mobile server system according to claim 9, wherein the proxy modifies the content request by replacing a Uniform Resource Locator (URL) of the content request with a keyword denoting the mobile terminal as the mobile server ([0031] and [0032]. Notice that, the user equipment 24 sends the request to support node 210. The request is such as the IP address or domain name for the user equipment or the user's server. When the request is granted, the support node 210 sets up a process that maps the public network address of user equipment 204 to an address of a virtual server).

Regarding claim 11, Lin et al. disclose all the limitation in claim 10. Further, Lin et al. disclose the mobile server system wherein the proxy utilizes Wireless Application Protocol (WAP) procedures to establish a connection with the mobile terminal ([0028]).

Regarding claim 12, Lin et al. disclose all the limitation in claim 11. Further, Lin et al. disclose the mobile server system wherein the WAP procedure includes a Session Initiation Request (SIR) (fig. 3, [0029 and [0031]. Inherently, when client devices 216 request server service for access to a Web page or Web site provided by mobile server 100 (user equipment 204). Next, the mobile server 100 sends request to support node 210 to provide a service server. Therefore, the request message sends from clients 216 to user equipment 204 (mobile server 100) which also includes a Session Initiation Request).

Regarding claim 13, Lin et al. disclose all the limitation in claim 12. Further, Lin et al. disclose the mobile server system wherein the SIR requests establishment of a Transmission Control Protocol (TCP) connection prior to providing the requested content to the network terminal ([0036]).

Regarding claim 16, Lin et al. disclose a mobile terminal wirelessly 216 coupled to a network which includes a network element 212 capable of relaying modified content requests to the mobile terminal 204 (fig. 3, [0024]), the mobile terminal comprising: a memory capable of storing at least a protocol module and a server directory containing requested content 108 ([0019]); a processor coupled to the memory and configured by the protocol module to provide the requested content to the network element in response to the modified content request ([0019]. Inherently, the mobile server 100 comprises a processor to perform these functions); and a transceiver configured to facilitate the requested content exchange with the network element

[[0024]], wherein the modified content request received from the network element indicates that the mobile terminal is a server for the requested content ([0029]).

Regarding claim 17, Lin et al. disclose a computer-readable medium having instructions stored thereon which are executable by a mobile terminal for supplying content by performing steps comprising: receiving a content request ([0019]); identifying a first parameter in the content request designating the mobile terminal as a content server ([0019]); and identifying a second parameter in the content request designating a location of the content to be supplied ([0019]).

Regarding claim 18, Lin et al. disclose a proxy 214 within a network used to facilitate content retrieval from a mobile server, comprising: means for receiving content requests ([0029]); means for modifying the content requests ([0032]); means for transmitting the modified content requests to the mobile server ([0038]); and means for receiving content from the mobile server in response to the modified content request ([0038]).

Regarding claim 19, Lin et al. disclose a computer-readable medium having instructions stored thereon which are executable by a network proxy for facilitating content retrieval from a mobile server by performing steps comprising: receiving content requests from network elements ([0025]); modifying the content requests to designate a mobile terminal as the mobile server ([0025]); forwarding the modified content requests to the mobile terminal ([0025]); and receiving content from the mobile terminal in response to the modified content requests ([0025]).

Claim Rejections - 35 USC § 103

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

Art Unit: 2685

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. Claims 2-3 are rejected under 35 U.S.C. 103(a) as being unpatentable over Lin et al. (Pub. No: 2003/0028612) in view of Mulligan et al. (Pub. No: 2003/0105864).

Regarding claim 2, Lin et al. disclose all the limitation in claim 1. But, Lin et al. do not disclose the method wherein the request is addressed to the mobile terminal by using a Mobile Station International Integrated Services Digital Network Number (MSISDN) associated with the mobile terminal.

In the same field of endeavor, Mulligan et al. disclose the method wherein the request is addressed to the mobile terminal by using a Mobile Station International Integrated Services Digital Network Number (MSISDN) associated with the mobile terminal ([0064]).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the mobile server of Lin et al. by specifically including the request is addressed to the mobile terminal by using a Mobile Station International Integrated Services Digital Network Number (MSISDN) associated with the mobile terminal, as taught by Mulligan et al., the motivation being in order to access to service functionality available on landline or wireless network.

Regarding claim 3, the combination of Lin et al. and Mulligan et al. disclose all the limitation in claim 1. Further, Lin et al. disclose the method wherein modifying the parameters of the request comprises: removing the MSISDN transmitted with the request ([0031] and [0032]); and replacing the MSISDN with a keyword that denotes the mobile terminal as a data

Art Unit: 2685

server ([0031] and [0032]. Notice that, the user equipment 24 sends the request to support node 210. The request is such as the IP address or domain name for the user equipment or the user's server. When the request is granted, the support node 210 sets up a process that maps the public network address of user equipment 204 to an address of a virtual server).

7. Claims 6-7 and 14-15 are rejected under 35 U.S.C. 103(a) as being unpatentable over Lin et al. (Pub. No: 2003/0028612) in view of Luna et al. (Pub. No: 2002/0123335).

Regarding claims 6 and 14, Lin et al. disclose all the limitation in claims 1 and 11 respectively. But, Lin et al. do not disclose the method wherein forwarding the modified request to the mobile terminal comprises using a Service Loading (SL) content type.

However, Luna et al. disclose the method wherein forwarding the modified request to the mobile terminal comprises using a Service Loading (SL) content type ([0025]).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the mobile server of Lin et al. by specifically forwarding the modified request to the mobile terminal comprises using a Service Loading (SL) content type, as taught by Luna et al., the motivation being in order to provision mobile stations that operate in their networks.

Regarding claims 7 and 15, the combination of Lin et al. and Luna et al. disclose all the limitation in claims 6 and 14 respectively. But, Lin et al. do not disclose the method wherein the SL content type comprises: an action field indicating that the mobile terminal is a data server; a pathname that indicates where the content is located within the mobile terminal; a username to identify the requesting network element; and a password associated with the username.

However, Luna et al. disclose the method wherein the SL content type comprises: an action field indicating that the mobile terminal is a data server; a pathname that indicates where the content is located within the mobile terminal; a username to identify the requesting network element; and a password associated with the username ([0025]).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the mobile server of Lin et al. by specifically including the SL content type comprises: an action field indicating that the mobile terminal is a data server; a pathname that indicates where the content is located within the mobile terminal; a username to identify the requesting network element; and a password associated with the username, as taught by Luna et al., the motivation being in order to provision mobile stations that operate in their networks.

8. Claim 8 is rejected under 35 U.S.C. 103(a) as being unpatentable over Lin et al. (Pub. No: 2003/0028612) in view of Luna et al. (Pub. No: 2002/0123335) and further in view of Wang et al. (Pub. No: 2003/0035409).

Regarding claim 8, the combination of Lin et al. and Luna et al. disclose all the limitation in claim 7. But, the combination of Lin et al. and Luna et al. do not disclose the method wherein the username includes the MSISDN of the requesting terminal.

However, Wang et al. disclose the method wherein the username includes the MSISDN of the requesting terminal ([0023]).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the mobile server of Lin et al. by specifically disclose the method

Art Unit: 2685

wherein the username includes the MSISDN of the requesting terminal, as taught by Wang et al., the motivation being in order to restrict devices from accessing any other end-point directly.

Conclusion

9. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Qi et al. (Pub. No: 20020028672) presentation of content from one cellular to another

Rouse et al. (Pub. No: 20020090933) access to scheduling application

Hosaka (Pub. No: 20030083052) information supply system

Tari et al. (Pub. No: 20030119486) recording medium therefor

Malville et al. (Pub. No: 20040172536) a public access terminal

Lagadec et al. (Pub. No: 20050025300) transmitting message

Skog et al. (Pub. No: 20020126708) message service routing system

Jokimen et al. (Pub. No: 20030027581) provisioning detection and notification

10. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Dai A Phuong whose telephone number is 703-605-4373. The examiner can normally be reached on Monday to Friday, 9:00 A.M. to 5:00 P.M..

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Edward Urban can be reached on 703-305-4385. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Dai Phuong
AU: 2685
Date: 04-14-2005

W.F. YOUNG
PRIMARY EXAMINER